



Dart Hawkesbury
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

3248
D2893-1

Job Sheet 165624



Part No: D2893-1

Job Qty: 5 ea

Part Name: Support



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 9/30/17

Job Tracking No:

Due Date: 10/31/17

Created By: Mario Poulin

Type: Stock

Description:

Note: DWG REV C IPP: C 02.11.26 Reformat; Added P/O KJ IPP D 06.04.19 removed alodine EC IPP Rev:E Added priming as per Rev B 07-04-30 JLM IPP F 08.03.19 Re-format EC verified by: DD IPP Rev:G 08-05-15 add QC14 DD verified by:EC IPP Rev:H 11.08.04 as per dwg rev.C DD verf:EC

Ship Via:

Bill of Materials

Part/Part Name	Part Note	Serial No	Quantity	Location
D2893-1 Support	DWG REV C IPP: C 02.11.26 Reformat; Added P/O KJ IPP D 06.04.19 removed alodine EC IPP Rev:E Added priming as per Rev B 07-04-30 JLM IPP F 08.03.19 Re-format EC verified by: DD IPP Rev:G 08-05-15 add QC14 DD verified by:EC IPP Rev:H 11.08.04 as per dwg rev.C DD verf:EC		0.000	
DSK078 D2893-1 Turning Detail	DWG REV A IPP rev A. 08.03.13 new issue EC		0.000	

Job Routing

Op No	Operation	Qty	Due Date	Standard		Workcenter/Supplier	
				Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time
90	Start up Operation	5 Ea	10/30/17	0.00	0.00	Start up container	
100	CNC Vertical Machining	5 pcs	10/30/17	0.33	9.80	HAAS 1	
110	QC	5 pcs	10/30/17	0.00	0.00	QC2	
120	QC	5 pcs	10/30/17	0.00	0.00	QC8	
130	Crosstubes	5 pcs	10/31/17	0.00	0.35	Crosstube	
140	QC	5 pcs	10/31/17	0.00	0.00	QC3	
170	Packaging	5 pcs	10/31/17	0.00	0.00	Packaging3	
180	QC21-SA	5 Ea	10/31/17	0.00	0.00	QC21	

Part Op 100 - 1-Machine as per Folio FA081

Descriptions: 130 - Per note 8 on page 1 of dwg D2893, Prep inner concave surface of support and apply 3M Scotch-Weld as per dwg.

170 - LOCATION : LG050

Job Allocations

Operation	Component Part	Required	Inventory	Allocated	Std Qty
90-Start up Operation	DSK078	3	0	0	0

Part Specifications

Specifications could not be found.

DART
AEROSPACE
S003772

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1270 Aberdeen Street
Hawkesbury, ON K64 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com



Support

PART NO: D2893-1

Revision:

Operation: Start up Operation

Quantity: 6

Change No:

Mfg Date: 10/30/17

Job No: 165624

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Page 1

Stop *NR2*

[illegible]

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : ☐					

Work Order ID 165624

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165624

Page 2

Item ID: D2893-1 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Support
 Start Date: 8/14/2017 Start Qty: 5.00 ***5*** Cust Item ID:
 Required Date: 8/28/2017 Req'd Qty: 5.00 ***5*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130		0.00							
130									
HandFXtube	Memo	0.74							
Hand Finishing Crosstubes	Per note 8 on page 1 of dwg D2893, Prep inner concave surface of support and apply 3M Scotch-Weld as per dwg. 24h of cure time.	138381							
140	QC3- Inspect Part Finish	0.00							
140									
QC	Memo	0.05							
Quality Control									
170	Identify as per dwg & Stock Location: _____	0.00							
170									
Packaging	Memo	0.05							
Packaging	LOCATION : LG050								

6 **DX** **17:11:03**

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval 	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Monday, August 28, 2017 11:58:04 AM

Item ID: D2893-1

Accept

N900040100

Setup Start *NS1*

Revision ID:

Item Name: Support

Stop ***NS2***

Start Date: 8/14/2017 **Start Qty:** 5.00

5

Cust Item ID:

Required Date: 8/28/2017 Req'd Qty: 5.00

5

Customer:

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/
Work Center ID

Operation Description

Set Up/ Run Hours

Tool ID**Tool #****Plan
Code**

**Accept
Qty**

Reject Qty

Reject
Number**Insp.
Stamp**

180

QC21- Final Inspection - Work Order Release

0.00

180

QC

Memo

0.50

Quality Control

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

Picklist Print

Page 1

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Work Order ID: 165624

165624

Parent Item: D2893-1

D2893-1

Parent Item Name: Support

Start Date: 8/14/2017

Required Date: 8/28/2017

Start Qty: 5.00

Required Qty: 5.00

Comments: IPP: C02.11.26Reformat; Added P/OKJ
IPP D 06.04.19 removed alodine EC
IPP Rev:E Added priming as per Rev B 07-04-30 JLM
IPP F 08.03.19 Re-format EC verified by: DD
IPP Rev:G 08-05-15 add QC14 DD verified by:EC
11.08.04 as per dwg rev.C DD verf:EC
IPP Rev:H

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
DSK078		Manufactured	No			100	Each	12.0000	0.5	2.5			

DSK078

D2893-1 Turning Detail

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
MAT060	12	
160604	4	
*162895	8	

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐							
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval				
Description Work Order Deviation				Disposition							
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		☐ Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter		FAULT CATEGORY		☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes		☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center		☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence	
		☐ OTHER : _____									

DART AEROSPACE LTD		Work Order: 165624
Description: Ø2.750 Support		Part Number: D2893-1
Inspection Dwg: D2893	Rev: C	Page 1 of 1

FIRST ARTICLE INSPECTION DIMENSION SHEET

				Record Actual Dimensions					6
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	5	
HAAS Section									
AA	2.985	3.005		2.992	2.990	2.988	2.988	2.985	2.987
AB	0.440	0.460		0.452	0.452	0.450	0.456	0.450	0.450
AC	0.125	0.160		0.160	0.160	0.160	0.160	0.160	0.160
AD	0.040	0.060		0.050	0.050	0.050	0.050	0.056	0.050
AE	0.188	0.193		0.188	0.188	0.188	0.188	0.188	0.188
AF	0.125	0.160		0.140	0.140	0.140	0.140	0.140	0.140
AG	0.140	0.160		0.149	0.149	0.149	0.149	0.149	0.149
AH	1.360	1.400		1.377	1.377	1.386	1.369	1.377	1.369
AI	0.040	0.060		0.050	0.050	0.050	0.048	0.049	0.049
AJ	1.190	1.230		1.219	1.219	1.219	1.213	1.209	1.213
AK	0.010	0.020		0.014	0.012	0.012	0.012	0.012	0.012
AL	0.053	0.073		0.063	0.063	0.063	0.063	0.063	0.063
AM	0.240	0.260		0.250	0.250	0.250	0.250	0.250	0.250
AN	2.518	2.538		2.535	2.535	2.535	2.535	2.535	2.535
AO	84.39	90.39		87.39	87.39	87.39	87.39	87.39	87.39
AP	0.261	0.266		0.261	0.261	0.261	0.261	0.261	0.261
AQ	0.053	0.073		0.063	0.063	0.063	0.063	0.063	0.063
AR									
AS									
AT									
Accept/Reject									

DAS

Measured by: 1kr 17/10/31	Date:
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9-89

Audited by: FK	Date: 17-11-2
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Preliminary Approval:	Date:
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Rev	Date	Change	Revised by	Approved
A	02.12.13	New Issue	KJ/RF	
B	07.05.08	Dimension AP revised	KJ/JLM	
C	08.04.21	Reformat	KJ/JLM	
D	12.07.31	Dwg Rev updated	KJ	

